

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Jeffrey W. Ronne, et al

Serial No.: 10/087,500

Filed: March 1, 2002

For: SNAP-IN ROOF RAIL AIR BAG ASSEMBLY
AND METHOD OF INSTALLATION

Group Art Unit: 3616

Examiner: Laura B. Rosenberg

Attorney Docket No.: GP-301390 / GM0447PUS

APPEAL BRIEFMail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an appeal brief from the final rejection of claims of the Office Action dated November 23, 2004. This application was filed on March 1, 2002.

I. REAL PARTY IN INTEREST

The real party in interest is General Motors Corporation, a corporation organized and existing under the laws of the state of Delaware, and having a place of business at Detroit, Michigan.

CERTIFICATION UNDER 37 C.F.R. § 1.8

I hereby certify that this correspondence and the documents referred to as attached therein are being transmitted by facsimile addressed to Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450 via fax number 703-872-9306 on:

Date of Deposit:

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Patrice L. Uchno Leland

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Signature

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II. RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences related to the present appeal.

III. STATUS OF CLAIMS

Claims 1-5 and 7-11 are pending in this application. Claim 6 is cancelled.

Claims 1-5 and 7-11 have been rejected and are the subject of this appeal.

IV. STATUS OF AMENDMENTS

An amendment after final rejection was filed on January 24, 2005, for which an advisory action was mailed February 14, 2005. The January 24, 2005 Amendment was not entered by the Examiner for purposes of appeal.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Applicants' invention relates to a roof rail air bag assembly designed for hands-only installation on a vehicle from outside of the vehicle without the use of external fasteners. The invention is recited both as an apparatus and as a method.

Specifically, a snap-in roof rail air bag assembly for a vehicle having a roof rail is claimed (claim 1). The snap-in roof rail assembly (such as roof rail assembly 10 shown in Figures 1-3 and 5) includes an air bag module (such as air bag module 12 shown in Figures 1, 2, 4, and 5 and described on page 6, lines 3-8 of the specification), a snap-in clip (such as snap-in clip 26 shown in Figures 1-3 and described on page 6, lines 11-12, and page 7, lines 8-9 and 20-26), and a removable serviceability attachment feature (such as removable serviceability attachment feature 28 shown in Figures 1-3 and 5 and described on page 6, lines 12-19). The air bag module includes an air bag inflator (such as air bag inflator 14 shown in

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Figures 1 and 2 and described on page 6, line 4). The air bag module also includes an air bag (such as air bag 16 shown in Figure 3 and in phantom in Figures 1, 2, 4 and 5 and described on page 6, line 4 and lines 9-10) with at least one cushion retention tab (such as cushion retention tab 24 shown in Figures 1-5 and such as cushion retention tab 24' shown in Figures 4 and 5, both described on page 6, lines 9-13, lines 27-29 and page 7, lines 30-32 to page 8, lines 1-2). The snap-in clip includes a fastening portion (such as fastening portion 40 shown in Figure 3 and described on page 7, line 9) and is permanently attachable to the roof rail and selectively attachable to the cushion retention tab (as shown in Figures 3 and 5 and described on page 8, lines 6-19). The removable serviceability attachment feature 28 is for attaching the air bag module 12 at the cushion retention tab(s) 24, 24' to the snap-in clip 26 by fastening the serviceability attachment feature 28 to the fastening portion 40 of the snap-in clip 26. The removable serviceability attachment feature 28 is also for selectively detaching the air bag module 12 from the snap-in clip 26 for removal of the air bag module 12 for service by removing the serviceability attachment feature 28 from the fastening portion 40 of the snap-in clip 26.

A roof rail air bag assembly is also claimed in combination with a vehicle having a roof rail (claim 10). The roof rail air bag assembly (such as roof rail air bag assembly 10 shown in Figures 1-3 and 5) is adapted for snap-in installation in the roof rail (such as roof rail 34 of Figures 3 and 5) from outside the vehicle, as described on page 7, lines 14-19. The roof rail air bag assembly 10 includes an air bag module (such as the air bag module 12), a snap-in clip (such as snap-in clip 26) and a removable serviceability attachment feature (such as removable serviceability attachment feature 28), each as described above.

The method claimed is a method of installing an air bag module having an air bag inflator and an air bag with at least one cushion retention tab in a vehicle having a roof rail

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(claim 7). The method includes attaching a snap-in clip having a fastening portion to the at least one cushion retention tab with a removable serviceability attachment feature by fastening the removable serviceability attachment feature to the fastening portion, as described on page 6 at lines 12-14. The method also includes installing the air bag module in the vehicle by inserting the snap-in clip into the roof rail, as described on page 7 at lines 14-19.

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VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-5 and 7-11 stand rejected under 35 U.S.C. § 103 as being unpatentable over Lubera et al. (United States Patent Application Publication No. 2001/0046426 A1) in view of Tajima et al. (United States Patent No. 6,485,048).

VII. ARGUMENTS

A. None of the References teach or suggest "an air bag with at least one cushion retention tab" as required by claims 1-5 and 7-11 (argued as a group).

The rejection under Section 103 of claims 1-5 and 7-11 is improper because none of the references teach or suggest "an air bag with at least one cushion retention tab" as required by independent claims 1 and 10 nor "attaching a snap-in clip ... to the at least one cushion retention tab" as required by independent claim 7.

A proper rejection under 35 U.S.C. § 103(a) requires that the Examiner establish *prima facie* obviousness. The legal concept of *prima facie* obviousness is a procedural tool of examination which applies broadly to all arts. It allocates who has the burden of going forward with production of evidence in each step of the examination process. See *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972); *In re Saunders*, 444 F.2d 599, 170 USPQ 213 (CCPA 1971); *In re Tiffin*, 443 F.2d 394, 170 USPQ 88 (CCPA 1971), *amended*, 448 F.2d 791, 171 USPQ (CCPA 1971); *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968).

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As recited in the MPEP, “[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.” MPEP § 2142.

Three basic criteria must be met to establish *prima facie* obviousness. MPEP § 2143. First, there must be some suggestion or motivation to modify a reference or combine teachings. *Id.* Second, there must be reasonable expectation of success. *Id.* Third, the prior art reference or references must teach or suggest all the claim limitations. *Id.*

The Examiner has failed to satisfy the third criterion necessary to establish *prima facie* obviousness, i.e., the prior art references cited by the Examiner in the §103 rejection of claim 1 fail to teach or suggest all the claim limitations.

The roof rail air bag assembly of claims 1 and 10 requires “an air bag module including ... an air bag with at least one cushion retention tab.” The cushion retention tab element of claims 1 and 10 also relates to other elements of those respective claims in that the claimed snap-in clip element must be “selectively attachable to the at least one cushion retention tab” and the removable serviceability attachment feature element is for “attaching the air bag module at the at least one cushion retention tab.” Similarly, the method of claim 7 requires “attaching a snap-in clip having a fastening portion to the at least one cushion retention tab.”

Thus, “an air bag with at least one cushion retention tab” is necessary to each of claims 1, 7 and 10 and claims 2-5, 8-9 and 11 which respectively depend therefrom. As stated in the specification at page 3, lines 26-27, “[t]he cushion retention tabs are *integrally* attached to the air bag and are used to help attach the air bag to the roof rail.” (italics added).

i. Lubera et al.’s canister mounting flange is not a cushion retention tab

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The Examiner improperly substitutes a canister mounting flange for the claimed cushion retention tab. In rejecting independent claims 1, 7 and 10, the Examiner states that:

Lubera et al. disclose a snap-in air bag assembly (#304) for a vehicle (#300) having a roof rail, comprising an air bag module (#304) including an air bag inflator (#324) and an air bag (#336, not labeled in figure 15) *with at least one cushion retention tab* (#340) a snap-in clip (#10a) permanently attachable (via wing members #100) and flange #62) to a vehicle structure (#308) and selectively attachable (via #74) *to the at least one cushion retention tab*, the snap-in clip including a fastening portion (helical lip #72), and a removable serviceability attachment feature (fastener #74 for attaching the air bag module *at the at least one cushion retention tab* to the snap-in clip by fastening the serviceability attachment feature portion of the snap-in clip (paragraph 0042, lines 1-4), and for selectively detaching the air bag module from the snap-in clip for removal of the air bag module for service by removing the serviceability attachment feature from the fastening portion of the snap-in clip (similar to use with the headliner configuration; paragraph 0039, lines 5-10). (italics added)

As noted by the Examiner, air bag 336 is not shown in Figure 15 of Lubera et al. In fact, although an air bag 336 is mentioned at column 4, line 8, it is not shown in any of the drawings, nor is its positioning with respect to the clip 10a described. Importantly, the

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Examiner misidentifies a mounting flange 340 of reaction canister 332 as a cushion retention tab. Lubera et al. state that:

The reaction canister 332 includes a mounting flange 340 having a plurality of holes 344, each of which is sized to receive a threaded fastener 74. (col. 4, lines 8-10)

a. The Examiner errs in interpreting "at least one cushion retention tab" in the claims.

In finding Lubera et al.'s mounting flange to be a "cushion retention tab," the Examiner reasons that:

the "cushion retention tab" feature is sufficiently broad to include any tab, flange, or mounting surface that helps in retaining a cushion on another surface. Thus, the mounting flange (#340) reads on the "cushion retention tab".

(November 23, 2004 Office Action, page 5)

The Examiner errs in arriving at this conclusion: claims 1, 7 and 10 clearly require "an air bag with at least one cushion retention tab," i.e., that the cushion retention tab be part of the air bag itself; "any tab, flange, or mounting surface that helps in retaining a cushion on another surface" cannot satisfy the cushion retention tab claim limitation.

The Examiner attempts to further support the use of the canister mounting flange 340 to fulfill the "at least one cushion retention tab" element by stating that:

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[t]here is no disclosure in the claim that the air bag must be in a certain position with respect to the clip or tab.
(November 23, 2004 Office Action, page 5)

This statement is clearly erroneous. The claimed "air bag with at least one cushion retention tab" necessarily requires that the cushion retention tab be part of the air bag. Additionally, the limitations that the claimed snap-in clip be "selectively attachable to the at least one cushion retention tab" and that the claimed removable serviceability attachment feature be for "attaching the air bag module at the at least one cushion retention tab to the snap-in clip" limits the position of the air bag with respect to the clip.

As stated by the Federal Circuit in *Brookhill-Wilk I, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298, 67 USPQ2d 1132, 1136 (Fed. Cir 2003):

The words used in the claims are examined through the viewing glass of a person skilled in the art. *Tegal Corp. v. Tokyo Electron Am., Inc.*, 257 F.3d 1331, 1342, 59 USPQ2d 1385, 1393 (Fed.Cir.2001). In the absence of an express intent to impart a novel meaning to the claim terms, the words are presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art. *See, e.g., Teleflex, Inc. v. Ficosa N. AM. Corp.*, 299 F.3d 1313, 1325, 63 USPQ2d 1374, 1380 (Fed. Cir. 2002).

Applicants submit that a person of ordinary skill in the automotive air bag field would understand "an air bag with at least one cushion retention tab" to require that the cushion retention tab be part of the air bag. This understanding is reinforced by the

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specification which states that “[t]he cushion retention tabs are integrally attached to the air bag.” (Specification at page 3, line 26, italics added). As stated by the Federal Circuit in *Brookhill-Wilk 1, LLC* at 1298-1299:

The written description must be examined in every case, because it is relevant not only to aid in the claim construction analysis, but also to determine if the presumption of ordinary and customary meaning is rebutted. *See Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250, 48 USPQ2d 1117, 1122 (Fed. Cir. 1998). The presumption will be overcome where the patentee, acting as his or her own lexicographer, has clearly set forth a definition of the term different from its ordinary and customary meaning. *See In re Paulsen*, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994); *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1387-88, 21 USPQ2d 1383, 1386 (Fed. Cir. 1992). The presumption also will be rebutted if the inventor has disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope. *See Teleflex*, 299 F.3d at 1324, 63 USPQ2d at 1380.

Applicants specification supports the ordinary and customary meaning of “an air bag with at least one cushion retention tab”, i.e., as meaning that the cushion retention tab is an integral part of the air bag.

ii. Tajima et al.'s installation portion is not a cushion retention tab.

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Because the Examiner admits that Lubera et al. "do not disclose the particulars of [the] different air bag modules" used with Lubera et al.'s clip, the Examiner combines Lubera et al. and Tajima et al., and in doing so, the Examiner again misconstrues the "cushion retention tab" feature, finding it to be:

sufficiently broad to include any tab, flange, or mounting surface that helps in retaining a cushion on another surface.

(November 23, 2004 Office Action, page 5)

Thus, in rejecting claims 2-5, 8, 9 and 11, the Examiner reasons that Tajima et al.'s:

installation portion (26, 28) reads on the "cushion retention tab."

(November 23, 2004 Office Action, page 5)

However, Tajima et al.'s installation portion (26, 28) cannot satisfy the "cushion retention tab" element of claims 1, 7 and 10, as limited therein, nor as further limited in claims 2-5, 8, 9 and 11 which respectively depend therefrom. The Examiner notes that Tajima et al. teach at least one cushion retention tab 26 (referred to in Tajima et al. as an "installation portion of the bag"; installation bracket 28 incorrectly referred to by the Examiner as part of the so-called retention tab) and a mounting bracket 33c (referred to in Tajima et al. as an installation portion of the inflator bracket). Furthermore, the Examiner notes that the "location of bolt [35] [is] similar to location of Lubera et al.'s serviceability attachment feature." However, as shown in Tajima et al.'s Figure 4 (first embodiment), Figure 11 (second embodiment) and Figure 19 (third embodiment), the so-called serviceability attachment feature (bolt 35) and the mounting bracket 33c are not even in physical proximity to the clip 37 and the cushion retention tab 26

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and thus also cannot satisfy the requirement of claims 1, 7 and 10 that the removable serviceability attachment feature be “for attaching the air bag module at the at least one cushion retention tab to the snap-in clip.” As stated at column 6, lines 27-36 of Tajima et al. with respect to the installation portion 26 (Examiner-named cushion retention tab):

An installation hole 26a, through which an installation bolt 29 passes is provided in each installation portion 26, as shown in FIGS. 3 and 4. Each installation portion 26 is further provided with an installation bracket 28 made from a metal plate. Each installation portion 26 is installed together with the installation bracket 28 *by means of the installation bolt 29* to an inner panel 2 on the roof side rail portion RR. The inner panel 2 is provided with a nut 2d for screwing the bolt 29. The nut 2d is fixed *in a location of the installation hole 2c.* (italics added)

In contrast, with respect to the so-called mounting bracket 33c, Tajima et al. provide at column 6, lines 63-67 and column 7 lines 1-4:

The installation portion 33c comprises installation holes 33d provided in two places. *An installation bolt 35* passes through each installation hole 33d. The installation bolts 35 are used for installing the inflator 31 in the interior panel 2 on a side of a body 1. The interior panel 2 is provided with a nut 2b for screwing the bolt 35. The nut 2b is fixed *in a location of an installation hole 2a.* (italics added)

Thus, Tajima et al. teach that the installation portion 26 (Examiner-named cushion retention tab) is installed with installation bolt 29 and nut 2d at installation hole 2c while installation portion

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33c (Examiner-named mounting bracket) is installed with bolt 35 (Examiner-named serviceability attachment feature) and nut 2b at installation hole 2a.

Accordingly, because, as discussed above, Lubera et al. do not disclose "an air bag with at least one cushion retention tab" as required by independent claims 1,7 and 10 and because the so-called cushion retention tab 26 of Tajima et al. is at a different location than the clip 37, serviceability attachment feature 35 and mounting tab 33c, Lubera et al. in view of Tajima et al. do not disclose, suggest or make obvious "a mounting tab for receiving the serviceability attachment feature *and for capturing the at least one cushion retention tab between the inflator bracket and the snap-in clip*", as required by claim 2, or "capturing *the cushion retention tab between the mounting tab and the snap-in clip*" as required by claim 9 (italics added). Additionally, Lubera et al. in view of Tajima et al. do not disclose "an attachment portion having a mounting tab for receiving the serviceability attachment feature *and for capturing the at least one cushion retention tab between the inflator bracket and the snap-in clip*", as required by claim 11 (italics added). Accordingly, the rejection under Section 103(a) of claim 2, claims 3-5 which depend therefrom, claim 9, and claim 11 is believed to be improper.

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iii. Summary

For the foregoing reasons, Applicants believe that the Examiner's rejection of claims 1-5 and 7-11 under Section 103(a) are erroneous, and reversal of the Examiner's rejections is respectfully requested.

Respectfully submitted,



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Enclosure - Appendix

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IX. APPENDIX - CLAIMS ON APPEAL

1. A snap-in roof rail air bag assembly for a vehicle having a roof rail, comprising:
 - an air bag module including an air bag inflator and an air bag with at least one cushion retention tab;
 - a snap-in clip permanently attachable to the roof rail and selectively attachable to the at least one cushion retention tab, said snap-in clip including a fastening portion; and
 - a removable serviceability attachment feature for attaching the air bag module at the at least one cushion retention tab to the snap-in clip by fastening said serviceability attachment feature to said fastening portion of said snap-in clip, and for selectively detaching the air bag module from the snap-in clip for removal of the air bag module for service by removing said serviceability attachment feature from said fastening portion of said snap-in clip.
2. The roof rail air bag assembly of claim 1, further comprising an inflator bracket having an inflator support portion supporting the air bag inflator and an attachment portion having a mounting tab for receiving the serviceability attachment feature, and for capturing the at least one cushion retention tab between the inflator bracket and the snap-in clip.
3. The roof rail air bag assembly of claim 2, further comprising an air bag cover protectingly covering the air bag, and having a tear seam along one edge.
4. The roof rail air bag assembly of claim 3, wherein the cushion retention tab extends through the air bag cover, for at least partially supporting the air bag and the air bag cover.

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5. The roof rail air bag assembly of claim 4, wherein the mounting tab of the inflator bracket is attached to the snap-in clip with the serviceability attachment feature.

6. (cancelled)

7. A method of installing an air bag module having an air bag inflator and an air bag with at least one cushion retention tab in a vehicle having a roof rail, comprising:
attaching a snap-in clip having a fastening portion to the at least one cushion retention tab with a removable serviceability attachment feature by fastening said removable serviceability attachment feature to said fastening portion; and
installing the air bag module in the vehicle by inserting the snap-in clip into the roof rail.

8. The method of claim 7, further comprising attaching the air bag module to an inflator bracket having an inflator support portion and an attachment portion with a mounting tab.

9. The method of claim 8, further comprising capturing the cushion retention tab between the mounting tab and the snap-in clip prior to attaching the snap-in clip to the cushion retention tab.

10. In combination with a vehicle having a roof rail, a roof rail air bag assembly adapted for snap-in installation in the roof rail of the vehicle, from outside the vehicle, the air bag assembly comprising:

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an air bag module including an air bag inflator and an air bag with at least one cushion retention tab;

a snap-in clip permanently attachable to the roof rail and selectively attachable to the at least one cushion retention tab said snap-in clip including a fastening portion; and

a removable serviceability attachment feature for attaching the air bag module at the at least one cushion retention tab to the snap-in clip by fastening said serviceability attachment feature to said fastening portion of said snap-in clip, and for selectively detaching the air bag module from the snap-in clip for removal of the air bag module for service by removing said serviceability attachment feature from said fastening portion of said snap-in clip.

11. The roof rail air bag assembly of claim 10, further comprising an inflator bracket having an inflator support portion connected to the air bag inflator and an attachment portion having a mounting tab for receiving the serviceability attachment feature, and for capturing the at least one cushion retention tab between the inflator bracket and the snap-in clip.